



U.S. Department of Transportation
National Highway Traffic Safety
Administration

EXTERIOR TRUCK FORM

National Automotive Sampling System
Crash Causation Special Study

1. Primary Sampling Unit Number _____
2. Year _____
3. Case Number - Stratum _____
4. Vehicle Number _____

VEHICLE IDENTIFICATION

5. Power Unit Type _____
(1) Straight Truck
(2) Tractor
(8) Other (specify): _____
(9) Unknown
6. Power Unit Vehicle Identification Number (VIN)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Left justify; Slash zeros and letter Z (0 and Z)
No VIN — Code all zeros

7. Cab Style _____
(1) Conventional
(2) Cab-over-engine
(3) Cab forward
(8) Other (specify): _____
(9) Unknown

8. Sleeper Berth _____
(1) Yes
(2) No
(9) Unknown

9. Dromedary Box _____
(1) Yes
(2) No
(3) Unknown

10. ITS Equipment Installed _____
(Code up to three units.)
(1) Headway detection unit
(2) Side/object detection unit
(3) Rollover warning unit
(7) Not applicable
(8) Other (specify): _____
(9) Unknown

11. Engine Control/Data Recorder Installed _____
(1) Yes (specify type): _____
(2) No
(9) Unknown
If installed, record the following data:
Engine RPM _____ (9997) Not applicable
(9999) Unknown
Vehicle Speed _____ KPH
_____ mph x = 1.6093 _____ KPH
(9997) Not applicable
(9999) Unknown
Gear Position (specify): _____

12. Vehicle Configuration

1 2 3 4 5 6 7 8 9 10

Left justify

- (-) No additional units
(R) Straight truck
(T) Tractor
(S) Semi-trailer
(F) Full trailer
(G) Gooseneck hitch
(O) Other trailer (specify): _____
(U) Unknown trailer type
(A) A dolly
(B) B train
(C) C dolly
(X) Unknown dolly
(J) Jeep
(P) Bus
(I) Implement of husbandry

13. Total Number Of Trailers _____

Code actual value
(0) None (includes bobtail tractor)
(7) Not applicable (includes straight truck)
(9) Unknown

Number Of Axles In Use

14. Power Unit _____
15. First Trailer _____
16. Second Trailer _____
17. Third Trailer _____

Code number of axles
(97) Not applicable (includes no trailer)
(99) Unknown

Number Of Lift Axles (Not in Use)

18. Power Unit _____
19. First Trailer _____
20. Second Trailer _____
21. Third Trailer _____

Code number of axles
(97) Not applicable (includes no trailer)
(99) Unknown

Number Of Steer Axles (includes self-aligning steer axles)

22. Power Unit _____
23. First Trailer _____
24. Second Trailer _____
25. Third Trailer _____

Code number of steer axles
(97) Not applicable (includes no trailer)
(99) Unknown

Trailer Type

26. First Trailer _____
27. Second Trailer _____
28. Third Trailer _____
(1) Semi
(2) Full
(7) Not applicable (includes no trailer)
(8) Other (specify): _____
(9) Unknown

VEHICLE IDENTIFICATION

Trailer Make

29. First Trailer _____
30. Second Trailer _____
31. Third Trailer _____
- ____ Record specific make
- (97) Not applicable (includes no trailer)
- (99) Unknown

Trailer Model Year

32. First Trailer _____
33. Second Trailer _____
34. Third Trailer _____
- Code all four digits of the model year
- (9999) Unknown

Trailer VIN

35. First Trailer VIN
- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

36. Second Trailer VIN
- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

37. Third Trailer VIN
- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
- Left justify : slash zeros and letter z (0 and z)
- No trailer – code all zeros
- No VIN tag – code all nines

Trailer Date of Manufacture

38. First Trailer _____
39. Second Trailer _____
40. Third Trailer _____
- Code month/yr.
- No trailer – code all zeros
- Unknown – code all nines

Body Style

41. Power Unit _____
42. First Trailer _____
43. Second Trailer _____
44. Third Trailer _____
- (01) Van
- (02) Open top van
- (03) Refrigerated van
- (04) Livestock carrier
- (05) Flatbed
- (06) Low boy
- (07) Flatbed with equipment
- (08) Flatbed with sides
- (09) Pole/logging
- (10) Tank-liquid
- (11) Tank-compressed gas
- (12) Tank-dry bulk
- (13) Auto carrier
- (14) Dump
- (15) Bottom dump/hopper bottom
- (16) Garbage/refuse
- (17) Cement Mixer
- (18) Other (specify): _____
- (97) Not applicable (includes tractor power unit)
- (99) Unknown

Gross Vehicle Weight Rating (GVWR)

45. Power Unit _____, _____ 0
46. First Trailer _____, _____ 0
47. Second Trailer _____, _____ 0
48. Third Trailer _____, _____ 0
- ____ Code GVWR to nearest 10 kilograms
- (0000) Less than 5 kilograms
- (9997) Not applicable
- (9999) Unknown

Power Unit

____, _____ lbsx.4536= _____, _____ kgs

First Trailer

____, _____ lbsx.4536= _____, _____ kgs

Second Trailer

____, _____ lbsx.4536= _____, _____ kgs

Third Trailer

____, _____ lbsx.4536= _____, _____ kgs

Empty Weight

49. Power Unit _____, _____ 0
50. First Trailer _____, _____ 0
51. Second Trailer _____, _____ 0
52. Third Trailer _____, _____ 0
53. Total empty weight _____, _____ 0
- ____ Code empty weight to nearest 10 kilograms
- (0000) Less than 5 kilograms
- (9997) Not applicable
- (9999) Unknown

Power Unit

____, _____ lbs x .4536 = _____, _____ kgs

First Trailer

____, _____ lbs x .4536 = _____, _____ kgs

Second Trailer

____, _____ lbs x .4536 = _____, _____ kgs

Third Trailer

____, _____ lbs x .4536 = _____, _____ kgs

Total

____, _____ lbs x .4536 = _____, _____ kgs

Vehicle Length

54. Power Unit _____ . _____ m
55. First Trailer _____ . _____ m
56. Second Trailer _____ . _____ m
57. Third Trailer _____ . _____ m
58. Total Length _____ . _____ m
- Code length to the nearest tenth of a meter.
- (000) Less than 0.1 meters
- (997) Not applicable
- (999) Unknown

Power Unit

____, _____ ft. x .3048 = _____ . _____ m

First Trailer

____, _____ ft. x .3048 = _____ . _____ m

Second Trailer

____, _____ ft. x .3048 = _____ . _____ m

VEHICLE IDENTIFICATION

Third Trailer

_____, ____ ft. x .3048 = _____ . ____ m

Total Length

_____, ____ ft. x .3048 = _____ . ____ m

CARGO INFORMATION**Cargo Type**

59. Power Unit _____
60. First Trailer _____
61. Second Trailer _____
62. Third Trailer _____
- (00) Empty _____
- (01) General freight _____
- (02) Household goods _____
- (03) Building materials (specify): _____
- (04) Metal (coils, sheets) _____
- (05) Heavy machinery _____
- (06) Large objects (specify): _____
- (07) Motor vehicles _____
- (08) Piggyback/tow-away _____
- (09) Gases in bulk _____
- (10) Solids in bulk _____
- (11) Liquids in bulk _____
- (12) Explosives _____
- (13) Logs, poles, lumber _____
- (14) Refrigerated foods _____
- (15) Mobile home _____
- (16) Farm products _____
- (17) Live animals _____
- (18) Other (specify): _____
- (75) Tractor power unit with container cargo _____
- (76) Tractor power unit with other bulk cargo (specify): _____
- (97) Not applicable _____
- (99) Unknown _____

Cargo Weight

63. Power Unit _____, _____ 0
64. First Trailer _____, _____ 0
65. Second Trailer _____, _____ 0
66. Third Trailer _____, _____ 0
67. Total Cargo Weight _____, _____ 0

_____ Code cargo weight to nearest 10 kilograms

(0000) Less than 5 kilograms

(9997) Not applicable

(9999) Unknown

Power Unit

_____, _____ lbsx.4536= _____, _____ kgs

First Trailer

_____, _____ lbsx.4536= _____, _____ kgs

Second Trailer

_____, _____ lbsx.4536= _____, _____ kgs

Third Trailer

_____, _____ lbsx.4536= _____, _____ kgs

Percent Of Cargo Capacity

68. Power Unit _____
69. First Trailer _____
70. Second Trailer _____

71. Third Trailer _____

_____ For solids, code percent of space occupied

(00) Empty

(96) 96+ Percent

(97) Not applicable (includes tractor power unit)

(99) Unknown

_____ For liquid loads code percent of tank volume occupied.

Also, report following data:

Tank capacity:

First trailer _____ . ____ l

Second trailer _____ . ____ l

Third trailer _____ . ____ l

Tank Load:

First trailer _____ . ____ l

Second trailer _____ . ____ l

Third trailer _____ . ____ l

*Capacity*First trailer
_____, _____ gal x 3.785 = _____ . ____ lSecond trailer
_____, _____ gal x 3.785 = _____ . ____ lThird trailer
_____, _____ gal x 3.785 = _____ . ____ l*Load*First trailer
_____, _____ gal x 3.785 = _____ . ____ lSecond trailer
_____, _____ gal x 3.785 = _____ . ____ lThird trailer
_____, _____ gal x 3.785 = _____ . ____ l**Hazardous Cargo**

72. Power Unit _____
73. First Trailer _____
74. Second Trailer _____
75. Third Trailer _____
- (1) Yes _____
- (2) No _____
- (7) Not applicable (includes tractor power unit) _____
- (9) Unknown _____

Cargo Spillage

76. Power Unit _____
77. First Trailer _____
78. Second Trailer _____
79. Third Trailer _____
- (0) No spillage _____
- (1) Non-hazardous spillage _____
- (2) Hazardous spillage _____
- (7) Not applicable (includes tractor power unit) _____
- (9) Unknown _____

TRUCK CONSPICUITY**Retroflective Tape Used**

80. Power Unit Cargo Body _____
81. First Trailer _____
82. Second Trailer _____
83. Third Trailer _____
- (0) No (leave related variables blank)
- (1) Yes
- (7) Not applicable (includes tractor power unit)
- (9) Unknown

Tape Pattern

84. Power Unit Cargo Body _____
85. First Trailer _____
86. Second Trailer _____
87. Third Trailer _____
- (1) Side/rear per FMVSS 108 or similar
- (7) Not applicable (includes tractor power unit)
- (8) Other pattern (specify): _____
- _____
- _____
- (9) Unknown

Tape Color

88. Power Unit Cargo Body _____
89. First Trailer _____
90. Second Trailer _____
91. Third Trailer _____
- (1) Red/white per FMVSS 108
- (7) Not applicable (includes tractor power unit)
- (8) Other pattern (specify): _____
- _____
- _____
- (9) Unknown

Tape Condition On Rear

92. Power Unit Cargo Body _____
93. First Trailer _____
94. Second Trailer _____
95. Third Trailer _____
- (1) Clean
- (2) Some dirt
- (3) Very dirty
- (7) Not applicable (includes tractor power unit)
- (9) Unknown

Tape Peeling/Damaged On Rear Underride Guard

96. Power Unit Cargo Body _____
97. First Trailer _____
98. Second Trailer _____
99. Third Trailer _____
- (00) No
- _____ Yes, indicate % missing/damaged
- (76) 76+ Percent
- (97) Not applicable (includes tractor power unit)
- (99) Unknown

Tape Peeling/Damaged On Other Rear Area

100. Power Unit Cargo Body _____
101. First Trailer _____
102. Second Trailer _____
103. Third Trailer _____
- (00) No
- _____ Yes, indicate % missing/damaged
- (76) 76+ Percent
- (97) Not applicable (includes tractor power unit)
- (99) Unknown

Tape Condition On Sides

104. Power Unit Cargo Body _____
105. First Trailer _____
106. Second Trailer _____
107. Third Trailer _____
- (1) Clean
- (2) Some dirt
- (3) Very dirty
- (7) Not applicable (includes tractor power unit)
- (9) Unknown

Tape Peeling/Damaged On Sides

108. Power Unit Cargo Body _____
109. First Trailer _____
110. Second Trailer _____
111. Third Trailer _____
- (00) No
- _____ Yes, indicate % missing/damaged
- (76) 76+ Percent
- (97) Not applicable (includes tractor power unit)
- (99) Unknown

EXTERIOR MIRROR DATA

112. Power Unit Equipped With Exterior Side View Mirrors? _____
- (1) Yes
- (2) No
- (9) Unknown
113. Exterior Mirror Locations Left _____
- (Code all that apply.) Right _____
- (1) Mounted on door
- (2) Mounted on front fenders
- (7) Not applicable
- (8) Other location (specify): _____
- (9) Unknown
114. Were Field of View Restrictions/Blind Spots Related to Crash Causation For This Vehicle? _____
- (1) Yes (specify): _____
- (2) No
- (9) Unknown

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts/

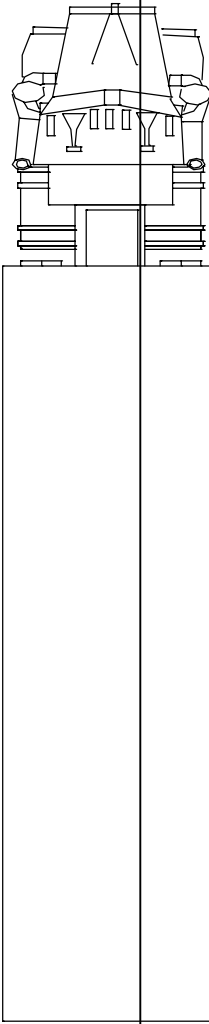
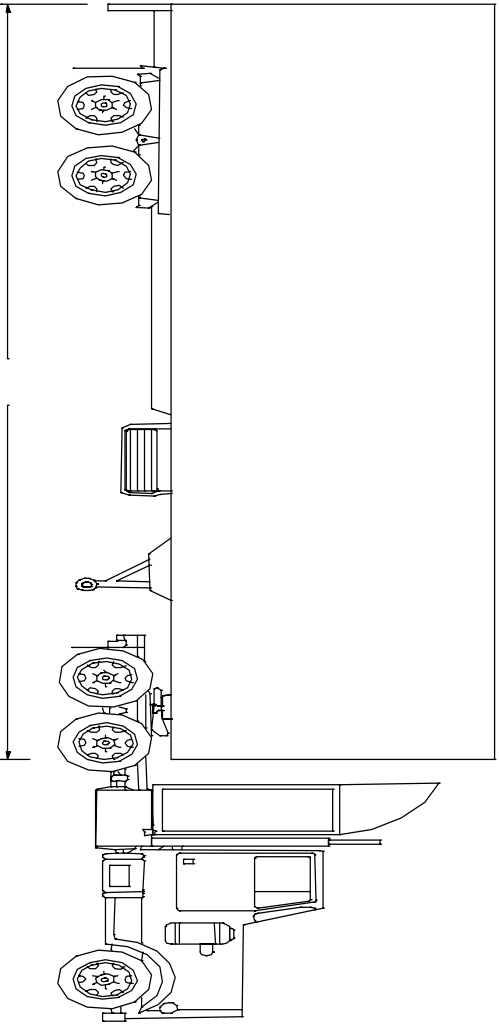
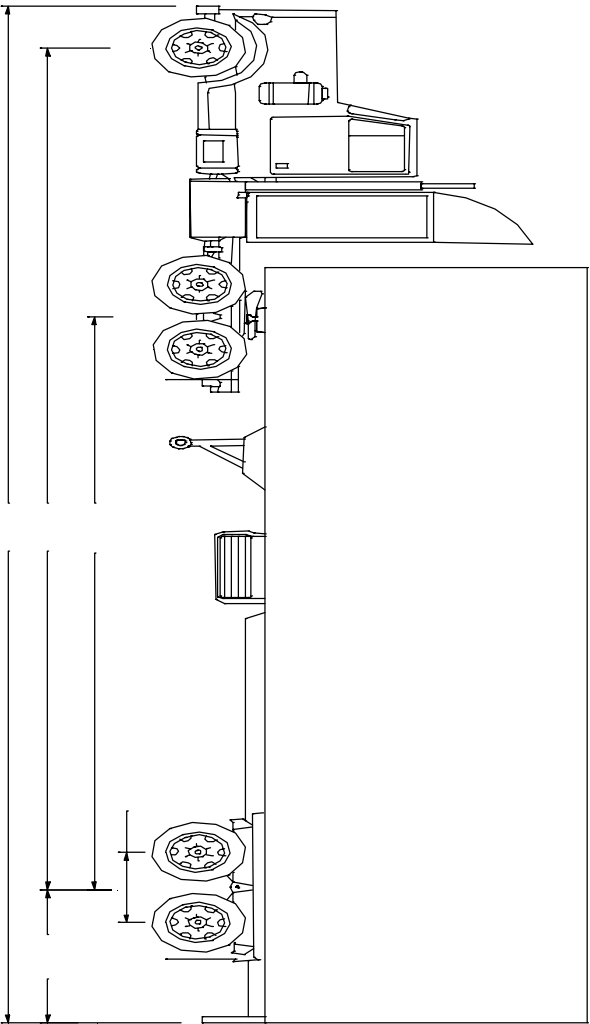
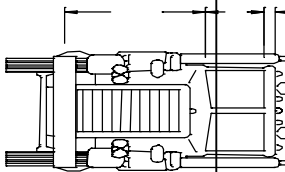
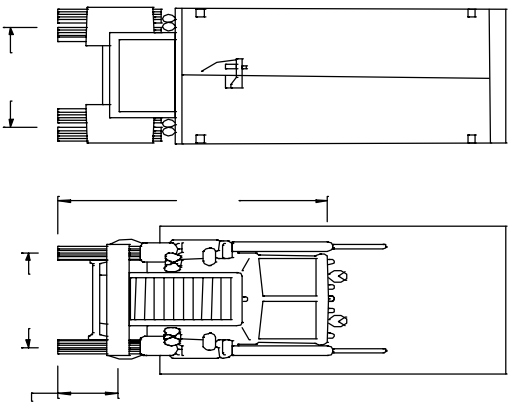
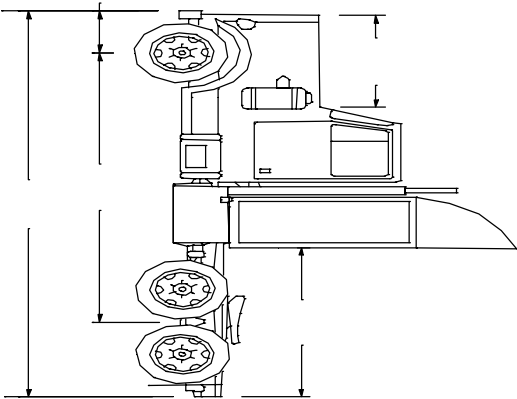
Impacts	Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush

NOTES: Identify the plane at which the measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

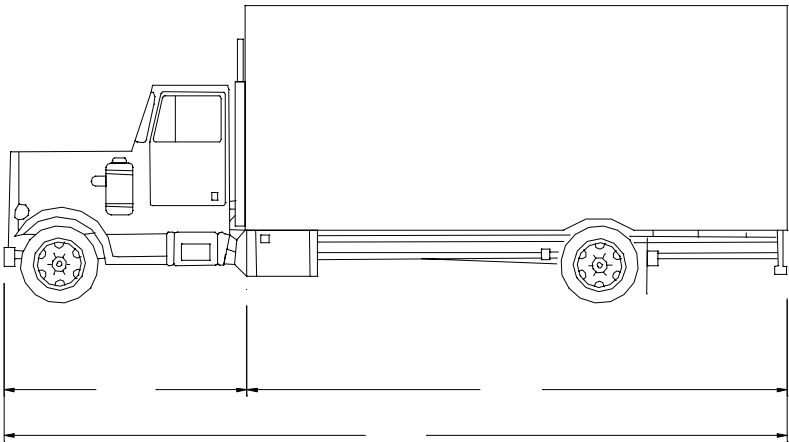
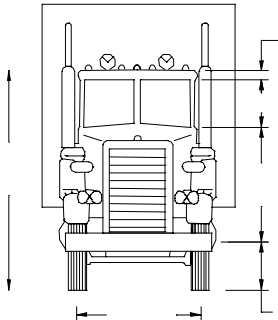
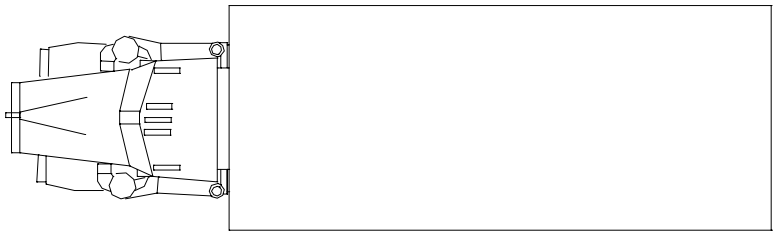
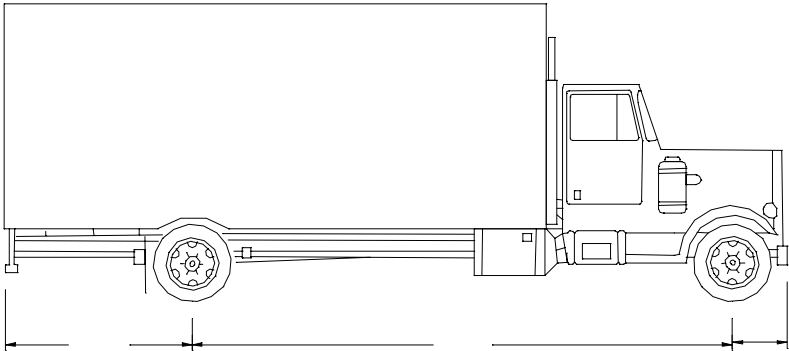
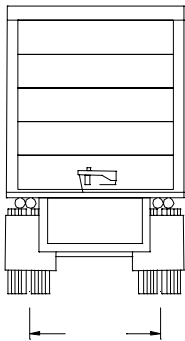
Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following:: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for measurement and maximum crush.

[illegible]

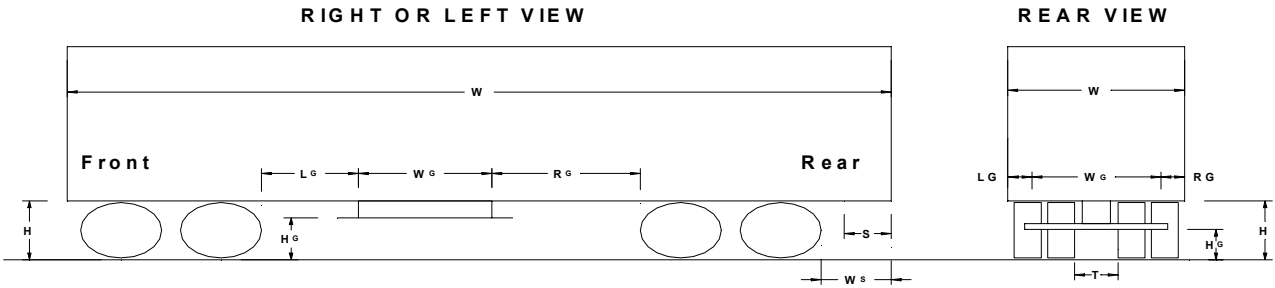
VEHICLE DAMAGE SKETCH



VEHICLE DAMAGE SKETCH

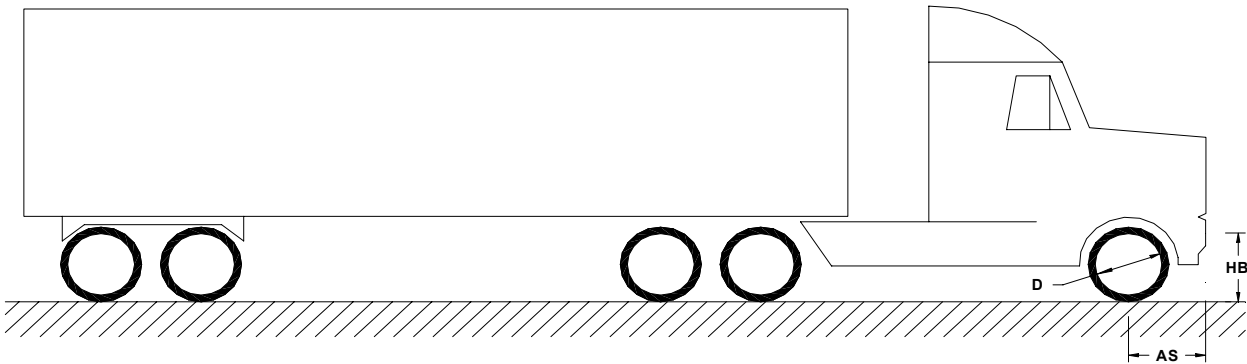


NOTE: COMPLETE THIS PAGE FOR REAR AND SIDE IMPACTS ONLY.



H Truck height above ground _____
W Truck width _____
W^{*} Wheel setback distance _____
T Distance between truck tires _____
S Guard setback distance _____

H^{*} Guard Height above ground _____
W^{*} Guard width _____
L^{*} Distance from left side of guard to truck wheel _____
R^{*} Distance from right side of guard to truck wheel _____



H_B Truck bumper height above ground _____
D Front tire diameter _____

A_S Front axle setback _____

DRIVER/COMPONENT COMPLIANCE

[illegible]

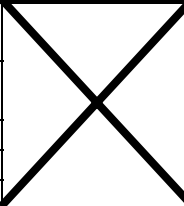
DISPOSITION CODES

- (1) Repaired at Scene
- (2) Towed/Escorted
- (3) Other (Specify): _____
- (8) Not applicable
- (9) Unknown

BRAKE INSPECTION								SYSTEM TYPE: (1) Air (3) Electric (2) Hydraulic (9) Unknown				
Axle Position	System Type	ABS Installed		ABS Functional		Adjuster Type		Chamber Size	Stroke Type		Stroke Length	
		Y	N	Y	N	Man	Auto		Long	Short	Left	Right
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

ADJUSTMENT CODES		Brake Inspection Notes:
Chamber Size		
(00.00) N	Not Examined	
(13.34 - 20.56)	Range of Applicable Outside Diameters in cm.	
(97.97)	Not applicable	
(99.99)	Unknown	
Stroke Type		Brake Inspection Notes:
(0)	Not Examined	
(√)	Use Checkmark to Indicate Stroke Type	
(7)	Not applicable	
(9)	Unknown	
Stroke Length		Brake Inspection Notes:
(0.00)	Not Examined	
(3.49 - 7.62)	Range of Applicable Stroke Lengths in cm.	
(7.77)	Not applicable	
(9.99)	Unknown	

HAZARDOUS MATERIALS

Inspection Item	Examined		Out-of Service		Disposition
	Y	N	Y	N	
Ship paper/manifest (HA)					
HM license (HB)					
HW registration (HC)					
Placards(HD)					
Packaging (HE)					
Markings (HF)					
Labels (HG)					
Loading/securement HH)					
Cargo/portable tanks (HI)					
Safety equipment (HJ)					
Not applicable					
(Inspection not required)					
	Reportable Quantity?		Waiver?		
CODES	Y	N	Y	N	

HAZARDOUS MATERIALS TYPE

- (A) 1.1 (Explosives)
 (B) 1.2 (Explosives)
 (C) 1.3 (Explosives)
 (D) 1.4 (Explosives)
 (E) 1.5 (Explosives)
 (F) 1.6 (Explosives)
 (G) 2.1 (Flammable Gas)
 (H) 2.2 (Non-Flammable Gas)
 (I) 2.3 (Poison Gas)
 (J) 3 (Flammable Liquid)
 (K) 4.1 (Flammable Solid)
 (L) 4.2 (Spontaneous Combustion)
 (M) 4.3 (Dangerous Wet)
 (N) 5.1 (Oxidizer)
 (O) 5.2 (Org. Perox.)
 (P) 6.1 (Poi. PG I & II)
 (Q) 6.1 (Poi. PG III)
 (R) 6.2 (Infectious Substance)
 (S) 7 (Radioactive)
 (T) 8 (Corrosive)
 (U) 9 (Miscellaneous)
 (V) (Combustible Liquid)
 (W) (ORM-D)
 (X) (Other)
 (Z) (Not applicable)